



Attorney Docket No: LUB-101

**In the United States Patent and Trademark Office**

Application No.: 10/618,566  
Filed: 07/10/2003  
Title: Method for assigning a price to an asset that is a derivative of a non-marketed variable  
Applicant(s): David G. Luenberger  
Examiner: Not assigned  
Art Unit: 3629

Mailed 12/16/03  
Palo Alto, CA

**Information Disclosure Statement**

Commissioner of Patents and Trademarks  
Washington, District of Columbia 20231

Dear Sir or Madam:

Attached is a completed Form PTO-1449 and copies of the pertinent parts of the references cited thereon.  
It is requested that the document(s) on the enclosed form be made of record.

**Part I (Authority)**

This statement is filed pursuant to:

( X ) 37 C.F.R. § 1.97(b).

This information disclosure statement is filed either (1) within three months of the filing date of the national applications; (2) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or (3) before the mailing date of a first office action on the merits, whichever event occurs last.

Accordingly, this information disclosure statement requires no fee and no certification.

( ) 37 C.F.R. § 1.97(c).

This information disclosure statement is filed after the period specified in 37 C.F.R. § 1.97(b), but before the mailing date of either (1) a final action under 37 C.F.R. § 1.113 or (2) a notice of allowance under 37 C.F.R. § 1.311.

Accordingly, this information disclosure statement requires either the fee specified in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c) (\$180), or a statement according to 37 C.F.R. § 1.97(e).

( ) 37 C.F.R. § 1.97(d).

This information disclosure statement is filed after the period specified in 37 C.F.R. § 1.97(c).

Accordingly, this information disclosure statement requires either the fee specified in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c) (\$180), and a statement according to 37 C.F.R. § 1.97(e).

**Conditional Petition**

It is respectfully requested that this information disclosure statement be considered, good cause being presented in Part III herein (certification). please treat this paper as the required petition.

If this statement crosses in the mail with an office action, or is otherwise not in the indicated category of 37 C.F.R. § 1.97, it is respectfully requested that this statement be treated in the next appropriate category and made of record.

To the extent required, please treat this paper as a conditional petition for acceptance of the information disclosure statement.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /E.W./

## Part II (Payment)

A check is enclosed as indicated:

- ☒ ( X ) No fee is due.
- ☐ ( ) The fee specified in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c) is enclosed (\$180).
- ☐ ( ) The petition fee specified in 37 C.F.R. § 1.17(p) to consider an information disclosure statement under 37 C.F.R. § 1.97(d) is enclosed (\$180).

## Part III (Statement)

Pursuant to 37 C.F.R. § 1.97(e), I certify:

- ☒ ( X ) No statement is necessary.
- ☐ ( )
  - (1) Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement.
  - ☐ ( ) The "communication from a foreign patent office" referred to in the certification is an International Search Report, possibly issued by the U.S. Patent and Trademark Office in its capacity as an International Search Authority or International Preliminary Examining Authority.
  - ☐ ( ) The "counterpart foreign application" referred to in the certification corresponds to an ancestor or descendant application of the application for which this information disclosure statement is filed.
- ☐ ( ) (2) No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c), more than three months prior to the filing of the statement.

## Part IV (Additional Statement)

An additional statement regarding these items of information ☐ ( ) is, ☒ ( X ) is not, enclosed.

Copies of the cited art ☒ ( X ) are enclosed, ☐ ( ) are of record in parent application Serial No. \_\_\_\_\_ and will be provided if the Examiner deems it convenient.

Respectfully submitted,

Dated: 12 DEC 2003



Thomas J. McFarlane  
Reg. No. 39,299  
2345 Yale Street, 2<sup>nd</sup> Floor  
Palo Alto, CA 94036  
tel: 650-424-0100  
fax: 650-424-0141



PTO/SB/21 (08-03)  
Approved for use through 08/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/618,566
	Filing Date	07/10/2003
	First Named Inventor	David G. Luenberger
	Art Unit	3629
	Examiner Name	
Total Number of Pages in This Submission	Attorney Docket Number	LUB-101

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Tianhua Gu, Reg. No. 52,480
Signature	<i>Tianhua Gu</i>
Date	12/15/03

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Aaa Kieszc2		
Signature	<i>Aaa Kieszc2</i>	Date	12/16/03

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /E.W./



FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE		ATTY. DOCKET NO. LUB-101		SERIAL NO. 10/618,566	
<b>LIST OF PRIOR ART CITED BY APPLICANT</b> (Use several sheets if necessary)		APPLICANT David G. Luenberger			
		FILING DATE 07/10/2003		GROUP 3629	
<b>U.S. PATENT DOCUMENTS</b>					
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	RELEVANT INFORMATION
A					
B					
C					
D					
E					
F					
<b>FOREIGN PATENT DOCUMENTS</b>					
	2- letter code	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION
					YES NO
I					
J					
<b>OTHER PRIOR ART</b> (Including Author, Title, Date, Pertinent Pages, Etc.)					
K		John C. Hull, "Options futures, & other derivatives," PRENTICE HALL, UPPER SADDLE RIVER, NEW JERSEY 07458, 2002.			
L		David Heath et al., "A comparison of two quadratic approaches to hedging in incomplete markets," MATHEMATICAL FINANCE, VOL. 11, NO. 4 (OCTOBER 2001) 385-413			
M		Eduardo S. Schwartz et al., "Rational pricing of internet companies," 2000, ASSOCIATION FOR INVESTMENT MANAGEMENT AND RESEARCH.			
N		Hua He, "Consumption and portfolio policies with incomplete markets and short-sale constraints: the infinite dimensional case," JOURNAL OF ECONOMIC THEORY 54, 259-304 (1991)			
O		Robert C. Merton, "Applications of option-pricing theory: twenty-five year later," THE AMERICAN ECONOMIC REVIEW, JUNE 1998.			
P		Hans Follmer et al., "Hedging of non-redundant contingent claims," 1986, ELSEVIER SCIENCE PUBLISHERS B. V. (NORTH-HOLLAND)			
Q		Fischer Black et al., "The pricing of options and corporate liabilities," THE JOURNAL OF POLITICAL ECONOMY, VOLUME 81, ISSUE 3(MAY-JUN., 1973), 637-654.			
R		Martin Schweizer et al., "A guided tour through quadratic hedging approaches," TECHNISCHE UNIVERSITAT BERLIN, GERMANY, NOVEMBER 15, 1999.			
S		D. G. Luenberger, "Projection pricing," JOURNAL OF OPTIMAZATION THEORY AND APPLICATIONS: VOL. 109, NO. 1, PP. 1-25, APRIL 2001.			



	T	David G. Luenberger, "A correlation pricing formula," JOURNAL OF ECONOMIC DYNAMICS & CONTROL, VOL. 26, NO. 7-8 (JULY 2002), 1113-1126.
	U	David G. Luenberger, "Arbitrage and universal pricing," JOURNAL OF ECONOMIC DYNAMICS & CONTROL, VOL 26, NO. 9 (AUGUST 2002), 1613-1628.
<b>EXAMINER</b> /Eric Wong/		<b>DATE CONSIDERED</b> 08/20/2009
* <b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		